

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,036	07/24/2006	Susanne Kronenberg	3926246	7260
30448 AKERMAN S	7590 02/21/2008 ENTERFITT		EXAMINER	
P.O. BOX 318	8 .		JACKSON, JAKIEDA R	
WEST PALM	BEACH, FL 33402-3188		ART UNIT	PAPER NUMBER
			2626	
			MAIL DATE	DELIVERY MODE
			02/21/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Summary	10/576,036	KRONENBERG ET AL.				
Office Action Summary	Examiner	Art Unit				
TI MAN INC DATE (III)	Jakieda R. Jackson	2626				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 09 November 2007.						
2a)⊠ This action is FINAL . 2b)□ This action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the me						
closed in accordance with the practice under E	x parte Quayle, 1935 C.D.	11, 453 O.G. 213.				
Disposition of Claims		•				
4) \boxtimes Claim(s) $7-12$ is/are pending in the application.						
4a) Of the above claim(s) is/are withdraw	vn from consideration.	•				
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>7-12</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
 Certified copies of the priority documents have been received. Certified copies of the priority documents have been received in Application No 						
	3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)		•				
1) Notice of References Cited (PTO-892)	4) 🔲 Interview Su	ummary (PTO-413)				
2) D Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)	/Mail Date				
Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	5) \(\bigcap \text{ Notice of Int} \\ 6) \(\bigcap \text{ Other:} \\ \bigcap \end{array}	formal Patent Application				

Application/Control Number: 10/576,036 Page 2

Art Unit: 2626

DETAILED ACTION

Response to Amendment

1. In response to the Office Action mailed August 23, 2007, applicant submitted an amendment filed on November 9, 2007, in which the applicant amended and requested reconsideration with respect to claim 7.

Response to Arguments

2. Applicant argues that although timeout is shown in columns 25-26 of Surace, it is different from the timeout concept of the present invention. For example, after a timeout, the system of Surace will say "Hurry up and say something", but will not output a detailed long prompt. However, Surace teaches time-out situations (e.g. a user has not provided a response within a predetermined period of time), column 22, lines 50-60 and that the prompts will be longer if user is having trouble (column 10, lines 26-36)

Applicant also argues that the prior art cited does not disclose always initializing a dialog step with a shortened prompt on the part of the speech dialog system independent of user's expertise. Applicant's arguments are persuasive, but are most in view of new grounds of rejections.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2626

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Surace et al. (USPN 6,144,938), hereinafter referenced as Surace in view of McAllister (USPN 7,260,187).

Regarding **claim 7**, Surace discloses a method for user-adaptive dialog guidance for a speech dialog system (dialog interaction; column 3, lines 62-66), in which a speech prompt is output by the speech dialog system (prompt is selected for output; column 10, lines 60-64), wherein in response to this the speech dialog system waits for an utterance by the system user, for which purpose a speech recognition system is activated in order to understand the utterance by the user (includes terms that are recognized by voice user interface; column 10, lines 60-64), wherein the system differentiates inexperienced (novice) and experienced users (expert; column 9, lines 3-24) and outputs a detailed prompt to inexperienced users (prompts become longer), while it uses a shortened prompt for experienced users (prompts become shorter), characterized in that a dialog step with a shortened prompt is initialized on the part of the speech dialog system (prompts should become shorter), after which a detailed prompt is output if there is no utterance by the system user in response to the shortened prompt after a specific time (column 10, lines 26-36 with appropriate length; column 9, lines 3-24 and columns 25-26), but does not specifically teach always initializing a

Art Unit: 2626

dialog step with a shortened prompt on the part of the speech dialog system independent of a user's expertise.

McAllister teaches a voice response apparatus (VRU) wherein the system may automatically select an appropriate level of detail based on the user response time or the number of erroneous or incomplete responses received from the caller to prior prompt, the prior prompt begin less detailed. Based on the responses the system will adapt to a user by a providing an appropriate script, which is not based on the users experience (column1, lines 44-67 with figure 3a and column 8, lines 41-59), for a more user friendly VRU which provides an improved man-machine interface.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Surace's method wherein it always initializes a dialog step with a shortened prompt on the part of the speech dialog system independent of the user's expertise, as taught by McAllister, for a more user friendly VRU which provides an improved man-machine interface, enhances user interaction with the system and minimizes user frustration (column 2, lines 17-20). This provides a user friendly interface mimicking human speech modalities. While automated systems have traditionally stepped users through seemingly endless menus of voice prompts and option, the present invention allows the user to interact much as talking with a human operator or attendant (column 10, lines 18-27).

Regarding claim 8, Surace discloses a method wherein the shortened prompt occurs in the form of a short audible signal (length of prompts should become shorter; column 10, lines 26-36).

14d11ber. 10/5/0,0

Art Unit: 2626

Regarding **claim 9**, Surace discloses a method wherein if the system user repeatedly fails to make an utterance in response to the shortened prompt (having trouble), the time period for the speech recognition timeout after which a detailed speech output occurs is shorted (column 10, lines 26-63 with column 22, lines 50-60).

Regarding **claim 10**, Surace discloses a method wherein the time period for the speech recognition system timeout is shortened as the number of instances in which there is no utterance in response to the shortened prompt (user has not provided a response) increases and occurs in a plurality of stages (column 22, lines 50-60).

Regarding **claim 11**, Surace discloses a method wherein if the system user already responds to the shortened prompt (lengths of prompts become shorter) the time period for the speech recognition system timeout is prolonged (column 10, lines 26-36 with column 22, lines 50-60).

Regarding **claim 12**, Surace discloses a method wherein the speech dialog system is configured in such a way that the system user can interrupt the outputting of the prompt by prematurely inputting a speech utterance (interrupt/barge-in; column 7, lines 48-61).

5. Claim 7 is alternately rejected under 35 U.S.C. 103(a) as being unpatentable over Surace et al. (USPN 6,144,938), hereinafter referenced as Surace in view of Comerford et al. (USPN 7,024,363), hereinafter referenced as Comerford.

Art Unit: 2626

Regarding claim 7, Surace discloses a method for user-adaptive dialog guidance for a speech dialog system (dialog interaction; column 3, lines 62-66), in which a speech prompt is output by the speech dialog system (prompt is selected for output; column 10, lines 60-64), wherein in response to this the speech dialog system waits for an utterance by the system user, for which purpose a speech recognition system is activated in order to understand the utterance by the user (includes terms that are recognized by voice user interface; column 10, lines 60-64), wherein the system differentiates inexperienced (novice) and experienced users (expert; column 9, lines 3-24) and outputs a detailed prompt to inexperienced users (prompts become longer), while it uses a shortened prompt for experienced users (prompts become shorter), characterized in that a dialog step with a shortened prompt is initialized on the part of the speech dialog system (prompts should become shorter), after which a detailed prompt is output if there is no utterance by the system user in response to the shortened prompt after a specific time (column 10, lines 26-36 with appropriate length; column 9, lines 3-24 and columns 25-26), but does not specifically teach always initializing a dialog step with a shortened prompt on the part of the speech dialog system independent of a user's expertise.

Comerford teaches a spoken language service wherein the system can operate in the opposite direction, wherein the prompt length is not based on the user's experience score. For example, if the user says "Help" and the Dialog manager replies with a short prompt line "Say the name of the application," the user's second request for "Help" following closely on the first could cause more complete prompts and guided

Art Unit: 2626

activity (column 18, lines 7-28). That is, the system will begin with a shorter prompt and once it is discovered that the user is having difficulties, the system will then give more complete prompts, to help support the illusion of understanding and cooperation.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Surace's method wherein it always initializes a dialog step with a shortened prompt on the part of the speech dialog system independent of a user's expertise, as taught by Comerford, to provide instruction and queue user responses in a manner which helps support the illusion of understanding and cooperation.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2626

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jakieda R. Jackson whose telephone number is 571-

272-7619. The examiner can normally be reached on Monday-Friday from 5:30am-

2:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David Hudspeth can be reached on 571-272-7843. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JRJ February 1, 2008

DAVID HUDSPETH

UPERVISORY PATENT EXAMINER

FOR BUDGOGY CENTER 2600

Page 8